

REMARKS

The present communication is filed in response to the Official Action mailed November 17, 2006, rejecting claims 1, 3-8, 26-36 presently pending in the application ("Official Action".) Of the pending claims, claims 1, 4, 5, 6, 8, 27 and 33 are independent claims. All the other claims remaining in the application depend from one of the independent claims.

Applicants note with appreciation the interview conducted on January 9, 2007, between the Examiner and the undersigned. Applicants respectfully submit that the foregoing amendments to the claims and remarks to follow are believed to be consistent with the discussions that took place during the interview and as indicated in the Interview Summary mailed January 16, 2007.

Claim Amendments

The preamble of claim 1 has been amended to recite "Broadcasting equipment for multiplexing downloadable content data together with program information onto a main broadcast signal of a broadcast program into a transport stream." Claim 1 has also been amended to recite "the transport stream including a plurality of data segments, each data segment being representative of the downloadable content data." Claim 1 has also been amended to recite "setting the purchase limit time based on the time it takes to download a data segment representative of the downloadable content data." Claim 1 has been further amended to improve its form.

Claim 4 has been amended to recite "setting a purchase limit time based on the duration of the time it takes to download a data segment representative of the downloadable content data." Claim 4 has also been amended to recite "repeatedly multiplexing the data segment and the program information a plurality of times onto the main broadcast signal to generate the transport stream."

The preamble of claim 5 has been amended to recite "A computer-readable medium encoded with computer readable instructions for performing a method for multiplexing downloadable music content data together with program information onto a transport stream for broadcast." Claim 5 has also been amended to recite "repeatedly multiplexing the downloadable music content data, the purchase time limit and the program information onto a broadcast signal of a program to generate the transport stream."

Claim 6 has been amended to recite "the content data being represented by a plurality of data packets in the transport stream." Claim 6 has also been amended to recite "wherein the purchase limit time is set based on the time it takes to download one or more of the data packets representative of the content data."

Claim 8 has been amended to recite "the contents data being represented by a plurality of data packets in the transport stream." Claim 8 has also been amended to recite "the contents data download time being set based on the time it takes to download one of the data packets and the time remaining to complete broadcasting of the transport stream."

Claim 27 has been amended to recite "the control message including a purchase limit time based on the time it takes to download the audio data packet."

Claim 33 has been amended to recite "a control unit that determines whether the audio data can be downloaded by comparing the purchase time limit to an elapsed time setting associated with the transport stream."

Claims 37 and 38 are presented for the first time. Each of these claims depend from claim 1 and are directed to additional features described and disclosed in the application. More specifically, claim 37 recites "wherein the purchase time limit is set as the time at which the next to last data segment in the

transport stream may be downloaded." Claim 38 recites "wherein the plurality of data segments form a sequence of n data segments in the transport stream, the n^{th} data segment being the last multiplexed segment, and wherein the purchase time limit is set in a time period during which the $(n-2)^{\text{th}}$ data segment arrives at a receiving unit."

Support for the foregoing amendments to the claims may be found by reference to, for example, page 26, 1.12 - page 27, 1.12 of the specification. Support may also be found by reference to FIGS. 1 and 4. Applicants therefore respectfully submit that the amendments to the claims do not constitute the addition of new matter to the application.

Claim Rejections — 35 U.S.C. §112

In the Official Action, the Examiner maintained his rejection of the claims under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. (Official Action at 3.) In responding to applicants' previous arguments, the Examiner did not find them persuasive. In that regard, the Examiner noted that FIG. 4 and the written description did not indicate that the purchase time limit was capable of being set to the time it took to download the music or content data.

As discussed during the interview of January 9, applicants respectfully submit that the specification does teach that the purchase time limit is settable based on the time it takes to download a music piece or, more generally, downloadable content data. With reference to FIG. 4, page 26, 11.12-22, teach that each of the music pieces A, B and C are repeatedly transmitted during broadcasting of a program. In the example shown in FIG. 4, that program comprises PROGRAM A. As shown in FIG. 4 and described at this portion of the specification, music pieces A, B and C are respectively repeatedly translated 15, 13 and 11

times. Each of these music pieces have a download time associated with it, i.e., T_a , T_b and T_c , respectively.

The specification further teaches that if a viewer instructs the IRD to purchase music piece C at time t_0 "during this sixth transmission of the music data, the music piece data to be transmitted for the seventh time immediately after the instruction is usually downloaded." (Specification, page 26, 11.23-27.) If downloading during the seventh time or timeslot fails, then "downloading is re-executed with respect to the music piece to be transmitted for the eighth time." (*Id.*, p.26, 1.27 - p.27, 1.3.)

The specification then states that "[t]he final transmission time of the music piece data on each of the musical pieces is used for re-execution." (*Id.*, p.27, 11.3-5.) Thus, the specification teaches that the final timeslot during which each of the music pieces is transmitted is reserved for re-execution. In accordance with these teachings, this final transmission time is kept for re-execution in the event that downloading in an earlier occurring timeslot fails for some reason.

The specification then states that the time "at which downloading of the music piece data transmitted immediately preceding to the final time is set as purchase limit time." (*Id.*, 11.5-8.) Thus, "[s]pecifically, as shown in FIG. 4, the purchase limit time of the musical pieces A, B and C are set at timings t_1 , t_2 , and t_3 , respectively." By setting the purchase limit time for each of the respective music pieces in this manner, the specification teaches that music piece data transmitted in the next timeslot after the purchase time limit (i.e., timeslots 14, 12 and 10 for musical pieces A, B and C, respectively) may be downloaded during the time required to download each of these music pieces (i.e., T_a , T_b , and T_c , respectively). In the event that the download fails for some

reason, then the final timeslot of each music piece data may be used for re-execution. As specification explains, "[b]y setting the purchase limit time as described above, occurrence of a situation such that downloading cannot be performed in spite of an instruction of purchase can be suppressed." (*Id.*, 11.10-12.)

In view of the foregoing, applicants respectfully submit that the specification teaches that the purchase time limit is preferably set such that at least the last two transmissions of the music piece data can be downloaded. Thus, as a general matter, the purchase time limit is set based on the time it takes to download the content data, while in the preferred embodiment comprises music piece data. For this reason, applicants respectfully submit that the specification fully supports and enables the claimed invention.

Claim Rejections - 35 U.S.C. §101

Claim 5 was rejected under 35 U.S.C. §101 on the basis that the claim was directed to non-statutory subject matter. (Official Action at 4.)

Applicants have amended claim 5 to now recite "A computer-readable medium encoded with computer readable instructions for performing a method for multiplexing downloadable music content data together with program information onto a transport stream for broadcast." Applicants respectfully submit that the amendments to claim 5 are consistent with the suggestions made by the Examiner. Applicants therefore respectfully submit that claim 5 now meets all the requirements of 35 U.S.C. §101. Therefore, withdrawal of the rejection of this claim under 35 U.S.C. §101 is respectfully requested.

Claim Rejections - 35 U.S.C. §102 and §103

The Examiner has maintained his rejection of the claims under 35 U.S.C. §102(b) and §103(a). More specifically, the

Examiner has rejected claims 1, 3-8, 26-31 and 33-35 as being anticipated by U.S. Patent 5,850,218 to Lajoie et al. ("*Lajoie*"). Claims 32 and 36 were rejected as being obvious over *Lajoie*. In addition, in responding to applicants previous argument concerning *Lajoie*, the Examiner indicated that those arguments were moot in view of the rejection of the claims for failing to comply with the enablement requirement under 35 U.S.C. §112. (Official Action at 3.)

Although *Lajoie* discusses downloading in the context of downloading software and/or news services, *Lajoie* includes no teaching or even a suggestion that the time limit by which content data may be purchased can be set based on the download time of the content data. Furthermore, even the portion of *Lajoie* that discusses near-video-on-demand services does not suggest that the purchase time limit may be somehow correlated to or based on the download time.

In rejecting each of the independent claims, the Examiner asserts that *Lajoie* at Col. 31, lines 1-32 discloses the limitation concerning setting a purchase limit time as is recited in each of the independent claims. Specifically, the Examiner asserts that the text "BUY UNTIL 8:15 PM" shown in event barker 544 of FIG. 28 and discussed at Col. 31, lines 1-32 is identical to, for example, the purchase limit time setting means limitation of claim 1. (Official Action at 6-7.)

Other than what is disclosed in event barker 544 in FIG. 28, *Lajoie's* disclosure includes no further description of what the phrase "BUY UNTIL 8:15 PM" means. But the context and description of what is described with respect to FIG. 28 makes it clear that it is not suggestive of the feature of the claims against which it is asserted.

Although *Lajoie* does not describe in detail each and every piece of text shown in FIG. 28, one skilled in the art would appreciate the following. First, FIG. 28 illustrates a

process for purchasing an Impulse Pay-Per-View (IPPV) event. (*Lajoie*, Col. 30, 11.64-65.) After a user presses or selects 75 from an interactive program guide display 540, the event barker 544 is displayed. (*Id.*, Col. 30, 1. 66 - Col. 31, 1. 1.) The event barker 544 informs the user of the IPPV event currently showing or upcoming. (*Id.*, Col. 31, 11.1-2.)

As clearly shown in FIG. 28, the event barker 544 shows that the movie now showing on channel 75 starts at 8:00 p.m. and finishes at 10:00 p.m. It also makes it clear that a user can buy this movie up until 8:15 p.m. Thus, the phrase "BUY UNTIL 8:15 P.M." means one and only one thing in the context of FIG. 28, which has nothing to do with the download time associated with the movie. That is, the user has until 8:15 p.m. to purchase the movie. *Lajoie* makes no mention of setting a purchase time limit based on the time it takes to download the content data.

In fact, *Lajoie's* method of allowing a user to buy or purchase a movie even though the movie may have started up to 15 minutes earlier, is precisely a problem that the claim invention is intended to overcome. In particular, the background of applicants' specification makes it clear that:

In a pay-per-view carried out on a movie channel or the like in digital satellite broadcasting, purchasing (watching) a program from a mid point of the program is not sufficiently worthy. Consequently, in the case where predetermined time is elapsed since the broadcasting start time of the program, purchase limitation time is set so that the program cannot be purchased.

(Specification, p.2, 11.13-18.) Thus, *Lajoie* suffers from the very problem that the claimed invention is directed to. To be clear, although the movie in *Lajoie* is not slated to end until 10:00 p.m., *Lajoie* does not permit purchase of the movie after 8:15 p.m. This is so even though it does not take 1.75 hours to

download a 2 hour movie. Indeed, as is the current practice with some pay-per-view offerings even today, the movie probably really does not start until 8:15 p.m. In contrast, claim 1 recites "setting the purchase limit time based on the time it takes to download a data segment representative of the downloadable content data."

In contrast, claim 4 recites "setting a purchase limit time based on the duration of the time it takes to download a data segment representative of the downloadable content data."

In contrast, claim 5 recites "setting a purchase limit time based on duration in time of one of the plurality of data segments for the music content data."

In contrast, claims 6 recites "wherein the purchase limit time is set based on the time it takes to download one or more of the data packets representative of the content data."

In contrast, claim 8 recites "the contents data download time being set based on the time it takes to download one of the data packets and the time remaining to complete broadcasting of the transport stream."

In contrast, claim 27 recites "a generator for creating a control message, the control message including a purchase limit time based on the time it takes to download the audio data."

In contrast, claim 33 recites "a control unit that determines whether the audio data can be downloaded by comparing the purchase time limit to an elapsed time setting associated with the transport stream."

In view of the foregoing, applicants respectfully submit that *Lajoie* simply does not anticipate or render obvious any of the claims of the present application. Specifically, *Lajoie* is beset by the very prior art problem to which the claimed invention is directed. Furthermore, *Lajoie* includes no suggestion that the purchase time limit can be based on the

download time. *Lajoie* is therefore distinguishable from the claims for at least these reasons.

Further in that regard, the Examiner's rejection of claims 32 and 36 under 35 U.S.C. §103(a) as being obvious over *Lajoie* fails for at least the foregoing reasons. That is, as these claims depend from one of the independent claims discussed above, they are neither anticipated nor rendered obvious by *Lajoie* for at least the foregoing reasons.

In addition, although claims 37 and 38 recite additional features of the claimed invention, these claims are also distinguishable over *Lajoie* for at least the foregoing reasons.

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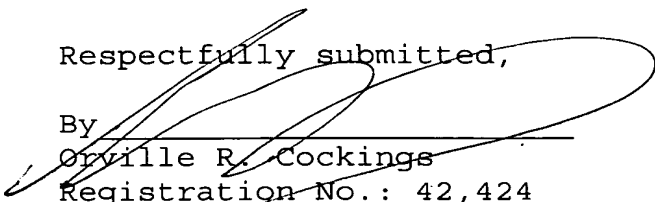
As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited. If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he telephone applicants' attorney at (908) 654-5000 in order to overcome any additional objections which he might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: February 6, 2007

Respectfully submitted,

By


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